IN THE CLAIMS:

Please amend claims 1-7, 9, 11, 13-19, 21, 23, 25-31, 33, 35, and 37-38 as follows. Please add new claims 39-47 as follows. Please cancel claims 8, 20, and 32 as follows.

1. (Currently Amended) A method, ~~of controlling a data transmission from a first node to a second node via a communication network wherein the first node is connected to the communication network by a communication protocol of a first type and the communication network uses at least in part a communication protocol of a second type for forwarding the data transmission from the first node to the second node, the method~~ comprising:

activating, by using a packet based data transmission protocol ~~(PDP)~~ context, a communication connection based on ~~the~~ a communication protocol of ~~the~~ a first type from ~~the~~ a first node to a ~~gateway general packet radio service~~ network support node ~~(GGSN)~~ of ~~the~~ a communication network;

allocating, by the ~~GGSN~~ network support node, a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

allocating, by the ~~GGSN~~ network support node, and based on a transition mechanism used by the communication network, a second connection information part comprising an address related to the communication protocol of ~~the~~ a second type to the communication connection of the first node; ~~and~~

storing, by the ~~GGSN~~ network support node, the first connection information part and the second connection information part in a register, wherein the second connection information part is associated with the first connection information part in a common entry in the register.;

tunneling, with the network service node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

2. (Currently Amended) The method according to claim 1, wherein, in the activating of the communication connection, an activation request is sent from the first node to the ~~GGSN~~ network support node, the activation request comprising at least one

of an indication for a dynamic addressing and an indication of an address type for the communication protocol of the first type.

3. (Currently Amended) The method according to claim 1, wherein, in the allocating of the first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node, the address related to the communication protocol of the first type is allocated by the ~~GGSN~~ network support node.

4. (Currently Amended) The method according to claim 1, wherein, in the allocating of the first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node, the address related to the communication protocol of the first type is requested from an external address allocation element contacted by the ~~GGSN~~ network support node.

5. (Currently Amended) The method according to claim 1, wherein, in the allocating of the second connection information part comprising an address related to the communication protocol of the second type to the communication connection of the first node, the address related to the communication protocol of the second type is allocated by the ~~GGSN~~ network support node from an internal pool of addresses.

6. (Currently Amended) The method according to claim 1, wherein, in the allocating of the second connection information part comprising an address related to the communication protocol of the second type to the communication connection of the first node, the address related to the communication protocol of the second type is requested from an external address allocation element contacted by the ~~GGSN~~ network support node.

7. (Currently Amended) The method according to claim 1, wherein, in the storing, the ~~GGSN~~ network support node stores the first connection information part and the second connection information part associated with each other by an entry in a table portion related to the communication connection of first node, wherein the second connection information part is stored in a specific table field of the table portion.

8. (Cancelled)

9. (Currently Amended) The method according to claim 1, wherein, in the activating the communication protocol of the first type comprises one type of an ~~Internet~~ internet protocol, in particular an IPv6 based protocol, and the communication protocol of the second type comprises another type of an ~~Internet~~ internet protocol, in particular an IPv4 based protocol.

10. (Cancelled)

11. (Currently Amended) The method according to claim 1, wherein, in the allocating, based on the transition mechanism ~~step~~, the transition mechanism used by the communication network comprises an automatic tunneling mechanism which uses, in particular, the intra-site automatic tunnel addressing protocol.

12. (Cancelled)

13. (Currently Amended) A system, ~~configured to control a data transmission from a first node to a second node via a communication network wherein the first node is connected to the communication network using a communication protocol of a first type and the communication network uses at least in part a communication protocol of a second type for forwarding the data transmission from the first node to the second node, the system being configured to:~~comprising:

~~activate~~an activation device configured to activate, by using a packet based data ~~control (PDP)~~ transmission protocol context, a communication connection based on ~~the~~ a communication protocol of ~~the~~ a first type between ~~the~~ a first node and a ~~gateway general packet radio service~~ network support node ~~(GGSN)~~ of ~~the~~ a communication network;

~~allocate~~a first allocation device configured to allocate, in the ~~GGSN~~ network support node, a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

~~allocate~~a second allocation device configured to allocate, in the ~~GGSN~~ network support node and on the basis of a transition mechanism used by the communication network, a second connection information part comprising an address related to ~~the~~ a communication protocol of ~~the~~ a second type to the communication connection of the first node;

~~associate~~an association device configured to associate, by the ~~GGSN~~ network support node, the second connection information part with the first ~~5~~ connection information part~~;~~, and store, by the ~~GGSN~~ network support node, the associated first and second connection information parts in a register~~.~~;

a tunneling device configured to tunnel, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

an execution device configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

14. (Currently Amended) The system according to claim 13, wherein the ~~system~~ activation device is configured to activate the communication connection and to send and receive an activation request from the first node to the ~~GGSN~~ network support node, the activation request comprising at least one of an indication for a dynamic addressing and an indication of an address type for the communication protocol of the first type.

15. (Currently Amended) The system according to claim 13, wherein the ~~system~~ first allocation device is configured to allocate the first connection information part wherein the address related to the communication protocol of the first type is allocated by the ~~GGSN~~ network support node.

16. (Currently Amended) The system according to claim 13, wherein the ~~system~~ first allocation device is configured to allocate the first connection information part wherein the address related to the communication protocol of the first type is requested

from an external address allocation element contacted by the ~~GGSN~~ network support node.

17. (Currently Amended) The system according to claim 13, wherein the ~~system~~ second allocation device is configured to allocate the second connection information part wherein the address related to the communication protocol of the second type is allocated by the ~~GGSN~~ network support node and selected from an internal pool of addresses.

18. (Currently Amended) The system according to claim 13, wherein the ~~system~~ second allocation device is configured to allocate the second connection information part wherein the address related to the communication protocol of the second type is requested from an external address allocation element contacted by the ~~GGSN~~ network support node.

19. (Currently Amended) The system according to claim 13, wherein the ~~system~~ association device is configured to store the associated first and second connection information parts in a register of the network element by updating an entry in a table portion related to the communication connection of first node, wherein the second connection information part is stored in a specific table field of the table portion.

20. (Cancelled)

21. (Currently Amended) The system according to claim 13, wherein the communication protocol of the first type comprises one type of an ~~Internet~~ internet protocol, in particular an IPv6 based protocol, and the communication protocol of the second type comprises another type of an ~~Internet~~ internet protocol, in particular an IPv4 based protocol.

22. (Cancelled)

23. (Currently Amended) The system according to claim 13, wherein the transition mechanism used by the communication network comprises an automatic tunneling mechanism which uses, in particular, the ~~Intra-Site Automatic Tunnel Addressing Protocol~~ intra-site automatic tunnel addressing protocol.

24. (Cancelled)

25. (Currently Amended) ~~A network node of a communication network~~ An apparatus, ~~the network node being configured to control a data transmission from a first node to a second node via the communication network wherein the first node is connected to the network node by means of a communication protocol of a first type and the communication network uses at least in part a communication protocol of a second~~

~~type for forwarding the data transmission from the first node to the second node, the network node~~ comprising:

a ~~gateway general packet radio service~~ network support node, ~~(GGSN) configured to~~the network support node comprising

an activation device configured to activate, by using a packet based data transmission protocol ~~(PDP)~~ context, a communication connection based on ~~the~~ a communication protocol of ~~the~~ a first type between ~~the~~ a first node and the ~~GGSN~~ network support node;

a first allocation device configured to allocate a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

a second allocation device configured to allocate, on the basis of a transition mechanism used by ~~the~~ a communication network, a second connection information part comprising an address related to ~~the~~ a communication protocol of ~~the~~ a second type to the communication connection of the first node;

an association device configured to associate the second connection information part with the first connection information part~~;~~, and store the associated first and second connection information parts in a register~~.~~;

a tunneling device configured to tunnel, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first

type between the first node and the second node using a connection based on the communication protocol of the second type; and

an executing device configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

26. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the ~~GGSN~~ activation device of the network support node is configured to activate the communication connection and to receive an activation request from the first node, the activation request comprising at least one of an indication for a dynamic addressing and an indication of an address type for the communication protocol of the first type.

27. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the ~~GGSN~~ first allocation device of the network support node is configured to

allocate the first connection information part and to comprise addresses related to the communication protocol of the first type and allocates a selected one of the addresses.

28. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the ~~GGSN~~ first allocation device of the network support node is configured to allocate the first connection information part and to request an address for the address related to the communication protocol of the first type from an external address allocation element.

29. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the ~~GGSN~~ second allocation device of the network support node is configured to allocate the second connection information part and to comprise a pool of addresses related to the communication protocol of the second type and allocates a selected one of the addresses.

30. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the ~~GGSN~~ second allocation device of the network support node is configured to allocate the second connection information part and to request an address for the address related to the communication protocol of the second type from an external address allocation element.

31. (Currently Amended) The ~~network node~~apparatus according to claim 25, wherein the ~~GGSN~~ association device of the network support node is configured to store the associated first and second connection information parts in a register of the network element by updating an entry in a table portion related to the communication connection of first node, wherein the second connection information part is stored in a specific table field of the table portion.

32. (Cancelled)

33. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein ~~transmission,~~ the communication protocol of the first type comprises one type of an ~~Internet~~ internet protocol, in particular an IPv6 based protocol, and the communication protocol of the second type comprises another type of an ~~Internet~~ internet protocol, in particular an IPv4 based protocol.

34. (Cancelled)

35. (Currently Amended) The ~~network node~~ apparatus according to claim 25, wherein the transition mechanism used by the communication network comprises an automatic tunneling mechanism which uses in particular the ~~Intra-Site Automatic Tunnel Addressing Protocol~~ intra-site automatic tunnel addressing protocol.

36. (Cancelled)

37. (Currently Amended) A system, ~~for controlling a data transmission from a first node to a second node via a communication network wherein the first node is connected to the communication network by a communication protocol of a first type and the communication network uses at least in part a communication protocol of a second type for forwarding the data transmission from the first node to the second node, the system~~ comprising:

activating means for activating, by using a packet based data transmission protocol ~~(PDP)~~ context, a communication connection based on ~~the~~ a communication protocol of ~~the~~ a first type between ~~the~~ a first node and a ~~gateway general packet radio service~~ network support node ~~(GGSN)~~ of ~~the~~ a communication network;

first ~~node~~ allocation means for allocating a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

second ~~node~~ allocation means for allocating, on the basis of a transition mechanism used by the communication network, a second connection information part comprising an address related to ~~the~~ a communication protocol of ~~the~~ a second type to the communication connection of the first node; and

~~third node~~ association means for associating the second connection information part with the first connection information part and for storing the associated first and second connection information parts in a register~~.~~;

tunneling means for tunneling, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

executing means for executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

38. (Currently Amended) ~~A gateway general packet radio service support node (GGSN) of a communication network~~ An apparatus, ~~the network node being configured to control a data transmission from a first node to a second node via the communication network wherein the first node is connected to the network node by a communication protocol of a first type and the communication network uses at least in part a~~

~~communication protocol of a second type for forwarding the data transmission from the first node to the second node, the GGSN~~ comprising:

activating means for activating by using a packet data protocol ~~(PDP)~~ context a communication connection based on ~~the~~ a communication protocol of ~~the~~ a first type between ~~the~~ a first node and the ~~GGSN~~ apparatus;

first allocating means for allocating a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

second allocating means for allocating, on the basis of a transition mechanism used by the communication network, a second connection information part comprising an address related to ~~the~~ a communication protocol of ~~the~~ a second type to the communication connection of the first node;

associating means for associating the second connection information part with the first connection information part~~;~~, and ~~storing means for~~ storing the associated first and second connection information~~.~~;

tunneling means for tunneling, with the apparatus being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

executing means for executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the apparatus

transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

39. (New) The method according to claim 1, wherein the packet based data transmission protocol context is a packet data protocol context.

40. (New) The method according to claim 1, wherein the network support node is a gateway node of a communication network, in particular a gateway general packet radio service support node.

41. (New) The system according to claim 13, wherein the packet based data transmission protocol context is a packet data protocol context.

42. (New) The system according to claim 13, wherein the network support node is a gateway node of a communication network, in particular a gateway general packet radio service support node.

43. (New) The apparatus according to claim 25, wherein the packet based data transmission protocol context is a packet data protocol context.

44. (New) The apparatus according to claim 25, wherein the network support node is a gateway node of a communication network, in particular a gateway general packet radio service support node.

45. (New) An apparatus, comprising:

a network support node, the network support node comprising

activating means for activating, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type between a first node and the network support node;

first allocation means for allocating a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

second allocation means for allocating, on the basis of a transition mechanism used by a communication network, a second connection information part comprising an address related to a communication protocol of a second type to the communication connection of the first node;

associating means for associating the second connection information part with the first connection information part, and store the associated first and second connection information parts in a register;

tunneling means for tunneling, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

executing means for executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.

46. (New) An apparatus, comprising:

an activation device configured to activate by using a packet data protocol context a communication connection based on a communication protocol of a first type between a first node and the apparatus;

a first allocation device configured to allocate a first connection information part comprising an address related to the communication protocol of the first type to the communication connection of the first node;

a second allocation device configured to allocate, on the basis of a transition mechanism used by the communication network, a second connection information part comprising an address related to a communication protocol of a second type to the communication connection of the first node;

an association device configured to association the second connection information part with the first connection information part, and storing the associated first and second connection information;

a tunneling device configured to tunnel, with the apparatus being a tunnel end-point, the data transmission based on the communication protocol of the first type between the first node and the second node using a connection based on the communication protocol of the second type; and

an executing device configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the apparatus transparently for the first node,

wherein the first node is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the first node to the second node.